

[Reprinted from PROCEEDINGS OF THE ROYAL SOCIETY OF MEDICINE, November, 1944, Vol. XXXVIII, No. 1, pp. 7-15 (Section of the History of Medicine, pp. 1-9).]

To Mr. Bishop
with grateful thanks
from
the Writer. A.S.M.

7. Feb. 1945.

Edward Bancroft M.D., F.R.S., and the War of American Independence

By Sir ARTHUR S. MACNALT, K.C.B., M.D., F.R.C.P.

CONAN DOYLE in the *Adventure of the Noble Bachelor* puts the following words into the mouth of Sherlock Holmes:

"It is always a joy to me to meet an American, for I am one of those who believe that the folly of a Monarch and the blundering of a Minister in far gone years will not prevent our children from being some day citizens of the same world-wide country under a flag which shall be a quartering of the Union Jack with the Stars and Stripes."

To-day when Britons and Americans are fighting side by side once more to preserve freedom and civilization, we are overjoyed to meet an American, and this afternoon I want to introduce you to one whose advice if taken might have helped to make that world-wide country in the eighteenth century.

Edward Bartholomew Bancroft, for many years forgotten, has many claims on our notice as physician, eminent scientist, philosopher, politician, novelist, technical expert in dyes and philanthropist. But it was not until seventy years after his death that he was also discovered to be the most remarkable spy of all time.

He was born at Westfield, Massachusetts, in 1744. The Bancrofts came of good yeoman stock and are a well-known family in Massachusetts. The founder of the family was John Bancroft who came there in 1632. John's grandson, Samuel, was born at West Springfield, Massachusetts, in 1768 and removed to Granville in the same State. He may have been a cousin of Edward's for the latter called one of his own sons Samuel. Distinguished Bancrofts were the Rev. Aaron Bancroft (1755-1839), Unitarian divine and author of a life of Washington (1807), George Bancroft (1800-1891), the historian and United States Minister to Great Britain, Hubert Howe Bancroft (1839-1901), a great educationalist. Professor Wilder Bancroft is Emeritus Professor of Chemistry in Cornell University. Thus Edward belonged to an illustrious New England family. As a boy he was apprenticed to a trade. Running away while in debt to his master, he became a sailor and made several voyages. On his return he paid what he owed. Like Franklin, he was largely self-taught, but he appears to have gone to school, perhaps at Groton, Connecticut, in 1758, for Silas Deane, a native of that town, was one of his teachers.

He next seems to have acquired some medical training, possibly as a surgeon's mate on board ship, for we find him as a medical attendant on a West Indian plantation and later in a similar capacity in Dutch Guiana (Surinam). Here Bancroft met Paul Wentworth, a member of a well-known New Hampshire family, who owned a plantation there and who greatly influenced his career afterwards. Bancroft took advantage of his post to study the flora and fauna of Guiana and early gained reputation as a botanist and zoologist. His researches were recorded in his first published book, *The Natural History of Guyana* (1769), written in the form of letters to his brother. He also studied tropical plants and their dye-producing properties.

The Natural History is a book of just over 400 pages. Its wide character is revealed by the title-page, which has all the detail of the title-pages of Defoe and other seventeenth and eighteenth century writers.

An
 Essay on the Natural History
 of Guiana in South America
 containing
 a Description of Many Curious
 Productions in the Animal and
 Vegetable Systems of that Country
 Together with an Account of
 The Religion, Manners and Customs
 of Several Tribes of its Indian
 Inhabitants
 interspersed with
 a Variety of Literary and Medical Observations
 in Several Letters
 from
 A Gentleman of the Medical Faculty
 During his Residence in that Country.

It is adorned with a short Latin quotation from Seneca and printed for T. Becket and P. A. de Hondt in the Strand, London, MDCCLXIX, price 6s. 8vo.

In the *Advertisement* Bancroft said he had determined at first to be anonymous, but reveals his identity through the representations of friends "the justice of their remonstrations overcoming his juvenile timidity".

The accounts of the zoology, botany, ethnology, customs and diseases of Dutch Guiana are interesting, but of necessity somewhat superficial in a single volume covering so wide a field.

Bancroft mentions the electric eel and discusses M. Reaumur's theory with respect to it. The third letter dealing with the religion, manners and customs of the Indian tribes is of special anthropological interest. This letter also includes an account of the Woorara or Indian Arrow Poison, the clinical effects of which are described and certain experiments. There is a footnote on p. 300 to this effect:

"As the Author has brought a considerable quantity of this Poison to *England*, any Gentleman, whose genius may incline him to prosecute these experiments, and whose character will warrant us to confide in his hands a preparation capable of perpetrating the most secret and fatal villainy, may be supplied with a sufficient quantity of the *Woorara*, by applying to Mr. Becket in the Strand."

In the concluding letter (Letter IV) Bancroft refers to the insurrection of the negro slaves in the Colony of Berbice in 1763 and its subjection by the aid of an English ship bringing marines and soldiers from Barbadoes. Here the author digresses into some reflections on slavery. The emancipation of slaves always concerned him and later in his life he corresponded with Thomas Jefferson on the subject of slavery in the North American Colonies.

Bancroft briefly describes the diseases he met with in his medical practice. They comprise "incurable leprosy", yaws, which he was the first to note could be conveyed by flies and for which he gave sulphur to promote the eruption; when the yaws suppurated he cured the disease by salivation with mercury; guinea-worms and worms generally; *Colica Pictonum* or West India dry gripes; intermitting fevers (malaria), which he treated with bark; the bilious putrid fever of the West Indies (yellow fever); and the bites of venomous snakes.

Altogether the book reflects the observation, general knowledge, scientific and medical learning of the young American doctor. When published it gave him some reputation. We find, for instance, long extracts from the book republished in the *Annual Register*.

Edward Bancroft came to England (? 1765 or 1766) and studied medicine, obtaining the degree of M.B. and afterwards that of M.D. He may have been a student of St. Bartholomew's, for he dedicated his *Natural History* to William Pitcairn, M.D., F.R.C.P., Physician of St. Bartholomew's Hospital, "with Respect and Gratitude". I cannot trace his original University. His name does not appear among the alumni of Oxford or Cambridge, but the registers were often imperfectly kept in the eighteenth century and as he sent his sons to Cambridge he may have been a graduate of that University. Dr. T. P. C. Kirkpatrick, at my request, has kindly searched the entrance records of Trinity

College, Dublin, the roll of graduates of that University and the roll of the King and Queen's College of Physicians without finding Bancroft's name. With Mr. Bishop's help I found Bancroft's name as M.D. Aberdeen in the Roll of Marischal College for the year 1774. The degree was awarded to him on the recommendation of Drs. Fordyce and Lettsom [sic]. George Fordyce, an eccentric physician, lectured on chemistry and was probably interested in Bancroft's chemical researches. He was a graduate of Aberdeen University and no doubt advised Bancroft to seek an M.D. there.

Bancroft dabbled in literature. He wrote on American subjects for the *Monthly Review*, on Franklin's recommendation, and in 1770 published a novel. It was entitled, *The History of Charles Wentworth, Esq., in a Series of Letters Interspersed with a Variety of Important Reflections calculated to Improve Morality and Promote the Economy of Human Life*, 3 vols., 12mo, London. Printed for T. Becket in the Strand, MDCCLXX. The motto is a quotation from Horace's *Ars Poetica*. No doubt Bancroft's friendship with Wentworth suggested the name of the hero. It is a scarce book, but I found a copy in the British Museum Library, with the help of Dr. H. Thomas and Mr. Ellis.

The novel is well written. Bancroft in the course of it quotes Aristotle, the classics, Lord Bolingbroke and *Tristram Shandy*. He was evidently well read. He is at times extremely up to date as, for instance, when he anticipates the New Commonwealth Party in saying "The soil in every country should be equally distributed among its inhabitants".

In *Charles Wentworth* Bancroft tried to do two things: to write an ethical and sociological treatise and a love-story. As a consequence, he failed in both aims and the novel, although interesting as a study of the author, cannot be regarded as a success. Probably Bancroft realized this, for he did not repeat the experiment.

Bancroft soon was recognized as a leading London physician, chiefly, it may be supposed, on account of his scientific attainments. He was engaged in researches into the production of colours and vegetable dyes, thus continuing the work which he had begun in Surinam. On May 6, 1773, he communicated a paper to the Royal Society "on producing and communicating colours", and on May 20 of the same year he was unanimously elected F.R.S. He is described in the register of the Society as "Edward Bancroft, M.B., afterwards M.D." His sponsors were the Astronomer Royal, the King's Physician (probably Sir John Pringle), and Benjamin Franklin. On April 14, 1774, he communicated a paper of two pages entitled *Work on Nigrescent Vegetables*. This was read at the Committee of Papers but not published.

Bancroft had much personal charm and had many distinguished friends. Among these may be mentioned Sir John Pringle, Joseph Priestly and John Coakley Lettsom. Bancroft may have met Lettsom in the West Indies or have had letters of introduction to him from America for Lettsom had many American friendships. As we know, Lettsom initiated the Medical Society of London in 1773 and Edward Bancroft appears in Samuel Medley's portrait of the Founders of that Society. In Sir StClair Thomson's *Annual Oration* where an account is given of these founders, Edward Bancroft has been confused with his son, Edward Nathaniel. The latter was only one year old in 1773 and was in the West Indies in 1800 when Medley painted this picture, which includes most of the leading medical men of the period. Bancroft seems to have taken an active part in the early days of the Medical Society. He staunchly supported Lettsom and on January 18, 1775, helped to elect him President and acted as Secretary of the Society for that special meeting.

Bancroft corresponded with French savants, especially Berthollet, the eminent French chemist, and was accepted by the scientists of both London and Paris as one of themselves and an authority in his own subject—dyeing. He was regarded by the East India Company as the chief expert of the day on dyes, and they submitted samples of Indian products to him for information concerning their dyeing properties. He helped the Company to introduce lac dye.

In 1775 he obtained a Government patent, which licensed him to make, use, exercise and vend in England, Wales and Berwick-upon-Tweed his discovery and invention that certain vegetables growing spontaneously in His Majesty's American Dominions, and never, as he believed, used for any Art, Trade or Manufacture within Great Britain except by himself and those employed by him, were capable of dyeing wool, cotton, &c. Three articles were included in the patent. First, the bark, fruit and excrescences of yellow or black oak; secondly, the bark and fruit of the American hickory or walnut tree; and thirdly, the red mangrove tree. The two latter were not of much use, but the yellow oak was most successful. Subsequently, Bancroft gave it the name of quercitron, derived from the Latin words *quercus citrini*. The value of quercitron bark in dyeing was his personal discovery.

Mr. Lawrence Morris, Editor of *The Dyer*, informs me that quercitron became one of the most important of the vegetable colouring matters and retained its position until

comparatively recent times. He adds: "In fact, I believe it is still used to a small extent. At any rate, it was advertised and listed in trade directories until the outbreak of war."

At 30 years of age then, Edward Bancroft was settled in London, married, a Fellow of the Royal Society and with a high scientific reputation. In starting manufactures of calico printing and woollen dyed goods he was turning his botanical and chemical knowledge to profitable use. His industry must have been indefatigable, for these multifarious occupations did not solely occupy the time of the young American. These were the days when the colonists of North America were beginning to stretch their limbs and realize that the mother country could no longer keep them in leading strings.

Edward Bancroft appeared now as an American patriot. He published in London, in 1769, *Remarks on a Review of the Controversy between Great Britain and Her Colonies*. This essay was a noteworthy contribution towards a possible settlement. He attended with his friend Benjamin Franklin the famous meeting in the Cockpit in 1774, when Franklin was arraigned before the Privy Council Lords Committee, and renewed his friendship with Paul Wentworth, now an American agent of the British Intelligence Service. The latter induced Bancroft to take up the hazardous and perilous role of a double spy.

In 1775 Paul Revere made his famous ride and hostilities between British troops and the Colonists began with the disastrous affair at Lexington. Franklin in that year returned to America, and in June 1776, Silas Deane came to Paris as the first diplomatic representative of the United States. He carried with him Franklin's instructions and letters to Bancroft. Bancroft saw Deane in Paris, learned the purpose of his mission and his secret negotiations with the French Government. In a memorial to the Marquis of Carmarthen (1784) which is among the Auckland Papers in the British Museum, Bancroft states that he had then resided ten years in England and expected to spend the rest of his life there. He felt as a loyal British subject that the Government should be informed of the danger of French interference and hoped that thus informed they would prevent it by some accommodation with the Colonies or by other means. He emphasizes that his motives at the outset were purely disinterested. On his return to England, Bancroft consulted Wentworth who took him to see the Secretaries of State, Lords Weymouth and Suffolk. These astute noblemen soon realized that in Bancroft they had found a most valuable informant. "I was urged on", writes Bancroft "to watch and disclose the progress of it; for which purpose I made several journeys to Paris, and maintained a regular correspondence with Mr. Deane through the Couriers of the French Government. And in this way I became *entangled* and obliged to proceed in a kind of Business, as repugnant to my feelings, as it had been to my original intentions." All this is no doubt perfectly true, but he adds: "Being thus devoted to the Service of Government, I consented, like others, to accept such Emoluments, as my situation indeed required."

Mr. Lewis Einstein whose authoritative work, *Divided Loyalties*,¹ treating of Americans in England during the War of Independence, first introduced me to Bancroft, and who has kindly helped me in the preparation of this paper, points out that in a letter to Deane the Doctor had much to say about his influential English friends "like Lord Camden, and Thomas Walpole, the member from Lynn, who at this time, unknown to Deane, was Bancroft's partner in speculations on the Stock Exchange as well as in certain ventures of shipping contraband to America". These are further indications of Bancroft's large business interests, some, I fear, not altogether reputable. He conveyed items of gossip and trivial information about English politics to Deane who accepted them indiscriminately, and wrote to the Secret Committee of Congress in Philadelphia that no one had better intelligence in England than Bancroft who was in close touch with the Whig Opposition. "Dr. Bancroft of London merits much of the Colonies", he added later.

The double rôle of American patriot and British spy was a difficult one to play, but, as we shall see, Bancroft played it to perfection. Both he and Deane were in communication with M. Garnier, the French Chargé d'Affaires in London, and Bancroft was able to send his letters to Deane uncensored to Paris in the French diplomatic pouch. Although this was done with the knowledge and approval of his employer, William Eden, Under-Secretary of State, who controlled the British Intelligence Service, nevertheless Eden distrusted him, and on one occasion when Bancroft's mistress was leaving to meet him in Paris, another American spy, the Reverend John Vardill, supplied her with a companion who secretly examined the letters she carried.

"The Olive Branch Petition" failed, and Congress published the Declaration of Independence. In December 1776, Franklin and "proud and jealous Arthur Lee"² joined Deane

¹ EINSTEIN, L.: *Divided Loyalties. Americans in England During the War of Independence*. Cobden and Sanderson. London, 1933.

² ARTHUR LEE (1740-1792) was born at Stratford, Connecticut. Educated at Eton and Edinburgh University, M.D. Edin. 1764 and F.R.S. 1766. He forsook Medicine for law and was called to the English Bar in 1775. He was appointed agent for Massachusetts in Great Britain in 1770. A.S.M.

in Paris as a joint commission. Lee suspected Bancroft of being a spy, but had no proof. To counter this, Bancroft arranged with William Eden, Under-Secretary of State, that he should be arrested on a charge of complicity in the plot of "John the Painter", John Aitken, for setting fire to British dockyards and exiled to Paris, where Franklin made him Secretary to the American Commission. In this way the British Government had access to all the secrets and plans of Congress and the Commissioners. Bancroft, under his secret agent name of "Mr. Edwards", throughout 1777 repeatedly implored the Government to make peace with the Colonies before their alliance with France was concluded. Had his advice been taken, a durable settlement might have been made and many thousands of British and American lives spared.

Unfortunately, King George III shut his eyes to the impending danger, writing to Lord North that "as Edwards is a stockjobber as well as a double spy, no other faith can be placed in his intelligence, but that it suited his private views to make us expect the French Court means war". Bancroft held up the information of Burgoyne's surrender at Saratoga in order to make "a killing on the London Stock Exchange", and netted a large sum by his astuteness. This confirmed the King's distrust. When the Treaty of Alliance between France and the United States was signed in 1778, Bancroft transmitted a copy of it to the British Government within the unprecedented short space of forty-two hours.

During the concluding years (1780-83) of the War of American Independence Bancroft continued to render good service to the British Cause. He supplied all particulars concerning the French fleets and armies to the Government. His position as Secretary to the Commissioners was so well established that de Vergennes in 1779 sent him to Ireland in order to survey the prospects of fomenting an insurrection in Ulster with aid from France. Bancroft advised against this scheme, and in 1780 his salary as a British agent was increased from £500 to £1,000 per annum. Nor was the indefatigable Doctor unmindful of his business interests. In this year, Paul Jones entered into a commercial enterprise with him for importing quercitron bark for dyeing wool. Berthollet in his *Elements of the Art of Dyeing* (1791) tells us that Dr. Bancroft had obtained an exclusive right to the traffic of this bark in France as well as in England. His agent in France was a "Mr. Brown," evidently a respected authority on dyeing.

In 1783 the Whig Ministry acknowledged the independence of America and a treaty was signed by the Americans without the knowledge of their French allies. In September general peace was restored. Bancroft, no doubt, was closely concerned as an intermediary behind the scenes in all these negotiations.

In June 1783 he saw Lord North and Mr. Fox in London and arranged to get information for them concerning the state of affairs in the United States. He ostensibly went there on a mission to recover payment of a loan which had been made by the Prince of Luxemburg to the State of South Carolina. He stayed with his friend Franklin in Philadelphia and obtained much political information which, on his return in 1784, he gave to the British Government. He had an interview with Mr. Pitt in which he advised a naval blockade of America, asserting if this were done that within a year the Colonies, finding their trade interests thus affected would return to their old allegiance. But the British Government had had enough of fraternal warfare.

It was at this time that Bancroft wrote his striking appeal to the Marquis of Carmarthen, Foreign Secretary, for arrears of salary in which he records his services as a British spy. This apparently wound up his employment in the British Intelligence Service and he proceeded thereafter with his researches in the chemistry of dyeing and with his commercial and speculative ventures. He retained his British citizenship, and in 1785 an Act of Parliament was passed concerning the discovery of quercitron bark, the use and application of which for dyeing, calico-printing, &c., were exclusively vested in Dr. Edward Bancroft for a term of ten years, in addition to his original monopoly of fourteen years, making twenty-four in all. This was procured by Government interest and evidently as a solatium to the ex-spy, for Mr. Eden was active in carrying the Bill through the House of Commons. He still retained an interest in affairs and oscillated between London and Paris from 1784 to 1792 keeping his finger in the British and American political pie.

Although a fortune must have passed through his hands, Bancroft was often pressed for money. He had a growing family to support, two establishments, one in London, the other in Paris, and his business enterprises involved him in expensive litigation. Yet he had a kind heart, and when the unjustly discredited Silas Deane wrote to him from Ghent, Bancroft invited him to London and helped him with money and medical care. Deane died in 1789 at Deal on the eve of departure for Canada and Bancroft wrote the account of his end.

He urged Franklin to write his autobiography. In 1786 Franklin wrote to Bancroft: "I have made some progress in my autobiography and hope to finish it this winter". In

the following year Bancroft collected some of Franklin's *Political and Miscellaneous Papers* and published them in London.

In 1789 John Jay suggested that Bancroft should be appointed an Envoy from the United States to carry out an informal mission to England, but Hamilton preferred that the task should be assigned to Gouverneur Morris, the United States Minister to France. The recently published *Diary of Gouverneur Morris*³ has a number of references to Bancroft, whom Morris met frequently both in Paris and London. We see the genial doctor bustling in, pressing the Minister "to eat a Bit of Mutton with him", recommending a good doctor, one Dr. Jefferies, and a surgeon for Morris's servant, all the while keeping his ears open for any political news or gossip which he can turn to his own advantage. At another time he has a "Certificate of Pensilvania to sell" or news about Lord Grenville asking the Hon. Thos. Walpole to go out to America. He gives a scientific dinner-party in London to which he invited Morris. The famous Dutch physician, Dr. John Ingenhousz, was another guest. On March 4, 1792, Morris notes: "Dine with Dr. Bancroft and go afterwards to Governor Franklin's where we play whist till very late". There are less edifying accounts of revels in Paris in 1791 when Morris dines with Bancroft and his mistress, or when he takes Bancroft and his friend, Mrs. Rose, to the opera.

Gouverneur Morris also acted as an intermediary between Paul Jones and Bancroft in the winding up of their partnership in the dyeing business (1790). Throughout the year 1792 Bancroft was chiefly engaged in preparing for the Press the first volume of his *magnum opus*. This was entitled *Experimental Researches Concerning the Philosophy of Permanent Colours and the Best Means of Producing Them by Dying, Callico Printing, &c.* by Edward Bancroft, M.D., F.R.S., Vol. I, 1794. Printed for T. Cadell, Jun., and W. Davies in the Strand.

In the preface he says a second volume is intended to follow. "That and the present volume will contain the results of many thousands of experiments and of much observation and reflection during the space of twenty-five years, in which this subject has been my principal occupation; and as it will probably continue to occupy a greater part of my time, whilst life and health are prolonged to me, I may be allowed to hope, that future discoveries will hereafter enable me to publish at least one other volume as supplementary to these, which are intended to convey all the knowledge I have hitherto acquired on this subject."

Von Meyer in his *History of Chemistry* states that the early scientific chemists endeavoured not only to prepare and apply colours by practical recipes, but also to aid the manufacturer by speculations upon the modes in which dyeing processes are brought about. Dyes were divided by them into two classes, according as they were capable of being fixed upon cloth with or without mordants, and Bancroft distinguished these as *adjective* and *substantive* dyes.

Bancroft's work thus constituted a valuable introduction to the chemical industries of to-day. His account of the scarlet dye "Barry Red" (cochineal), his mordant for quercitron bark in the woollen dye and his discovery of a mordant for dyeing with Prussian blue may be specially singled out for notice. His book became the standard British and American authority on the subject of dyeing, though Thomas Packer in *The Dyer's Guide* (1816) says: "Bancroft is too expensive and voluminous for an introductory work". Thomas Cooper, Professor of Chemistry in Dickinson College, Carlisle, Pennsylvania, in his book, *A Practical Treatise on Dyeing and Callicoe Printing*, published in 1815, observes in his preface: "Bancroft, who having discovered and secured a monopoly of the bark of the American black oak, turned his attention to dyeing, has published a very valuable treatise, but not a practical one. The history and description of the drugs used, and the theory that pervades the book is excellent". He adds that if he were a dyer and a young lad was sent to him to be instructed in the art he would first expect of him a good knowledge of the elements of chemistry. "I should then instruct him in the materials used in the art of dyeing. Bancroft's book to which mine is a practical supplement would do this better than any other".

Mr. Lawrence Morris writes to me: "Bancroft's book *The Philosophy of Permanent Colours*, was the first important work on dyeing and dyestuffs in the English language. It remained of considerable value and was widely read up to the time of the discovery of the first coal-tar dyestuffs in the 'fifties' and 'sixties' of the last century, and for long after".

In this work Bancroft displays his profound knowledge for those days of applied chemistry and of botany. The book had a ready sale. The edition of a thousand copies was soon exhausted and Bancroft mentions that second-hand copies, when they could be

³ *A Diary of the French Revolution*, by GOUVERNEUR MORRIS, 1752-1816, Minister to France during the Terror edited by Beatrix Cary Davenport, 2 vols., G. G. Harrap and Co., Ltd., London, 1939.

procured, were currently sold ("though without any benefit to me") for *six times their original price*.

In 1799 Bancroft failed to get his monopoly for importing quercitron bark renewed; the bill for extension passed the Commons with commendable speed, but was thrown out by the House of Lords owing to organized opposition by Northern dye manufacturers. Bancroft wrote a pamphlet of protest to Parliament upon the subject. He writes in 1813: "I was left with very little remuneration for the labours of a great part of my life. In less than twelve months this bark rose to three times the price at which it had been invariably supplied by me, and at which I should have been bound to supply it for another term of seven years, if the bill had become law; and it has on the average been at nearly double that price to the present time. This is the *only instance*, I believe, in which an invention ever became more *costly* after the expiration of a monopoly, granted to remunerate the inventor, than it was during the continuance thereof, and it has *demonstrated* most *incontrovertibly*, that my opponents were greatly *deceived* and that I was greatly wronged".

With the idea of compensating himself financially for this disappointment, Bancroft postponed work on the second volume of *The Philosophy of Permanent Colours*, and, although nearly 60 years of age, made two voyages, one to North and the other to South America. We learn from a note to his son's *Essay on Yellow Fever* that in 1804-5 he was in South America and stayed with Dr. and Mrs. Ord when going from Demarary (Demerara) to Berbice in British Guiana and returning thence. Dr. Ord was formerly Surgeon to the 39th Regiment. Bancroft ascertained from him that he did not consider Yellow Fever contagious, and obtained a similar opinion from Mr. Dunkin, late Garrison Surgeon at Demarary and then Deputy Inspector of Army Hospitals. The veteran traveller probably also visited Surinam and renewed old friendships both there and during his tour of the United States. When one remembers the discomforts and perils by land and sea in travelling in the early part of the nineteenth century and the grave risks of contracting yellow fever and malaria in South America, the Doctor's courage and adventurous spirit at a comparatively advanced age call for high commendation. But, as he himself tells us, in both of the two expeditions his expectations of financial success were frustrated by ill-health, and he returned to England "having then attained an age but little suited to a renewal of such undertakings".

He was now an old man. The days of midnight revels in London and Paris were over; political scheming and intrigues were things of the past. Yet his brain still was active, and he pursued his chemical experiments with all the zeal of the true scientist. He must have been cheered by his eldest son's professional distinction. In 1811 he edited this son's *Essay on Yellow Fever*. He supplied a number of footnotes to the book, but does not obtrude himself as editor.

In 1813 Bancroft published a revised first volume and the promised second volume of *The Philosophy of Permanent Colours*. He notes on the title-page that he is a Fellow of the American Academy of Arts and Sciences of the State of Massachusetts Bay. An American edition was published by Thomas Dobson, Philadelphia, in two large octavo volumes, price six dollars. This work had an equally good reception to that given to the volume published in 1794.

The last publication of Bancroft's which I have been able to trace appeared in 1816 in the *Annales de Chimie*, Vol. III, pp. 225-237. It was entitled: "Instruction concernant les préparations nommées 'lac-lake' et 'lac-dye'."

Bancroft's residences in London were various. In 1775 he lived in Downing Street, Westminster. He was probably in practice there as a physician for it was then a doctor's street. Tobias Smollett set up practice there in 1744. In 1785 Bancroft resided in Villiers Street, York Buildings, and in December 1798 at Francis Street, St. Pancras. He also lived at Turnham Green, perhaps originally at the suggestion of Dr. Ralph Griffiths, the Editor of the *Monthly Review*, who had a house there.

Universally respected and honoured, Edward Bancroft died at Margate on September 8, 1821, aged 77 years. Short obituary notices are to be found in the *Gentleman's Magazine* and the *Annual Register* for that year.

As I have said, it was not until seventy years after his death that his activities as a spy became known. His grandson, a General in the British Army, was so distressed by the revelation that he destroyed the greater part of Bancroft's papers and correspondence, thereby inflicting an irreparable loss on the secret history of the American War of Independence.

Dr. Bancroft had several children of whom the eldest, Edward Nathaniel, calls for special notice. He was born in London and educated at Dr. Burney's famous Academy at Hammersmith and under Dr. Parr at Norwich. At the age of 17 he was admitted a

sizar of St. John's College, Cambridge. He matriculated in the Michaelmas Term of 1789 as a scholar. He was readmitted to the College as a Fellow-Commoner on April 17, 1794, took his M.B. in the same year and proceeded to M.D. in 1804. In 1795 he was appointed physician to the Army and in this capacity served in the Windward Islands, in Portugal, the Mediterranean, Egypt, &c. Returning to England he settled in London, was admitted a Candidate of the Royal College of Physicians April 8, 1805, and a Fellow on March 31, 1806. He delivered the Goulstonian Lectures in 1806-7, choosing the subject of yellow fever. He was Censor in 1808 and was elected physician to St. George's Hospital in that year. According to Munk, his health required a warmer climate, and he resigned his hospital appointment in 1811, going out to Jamaica as physician to the Forces. He died there on September 18, 1842, aged 70, being then deputy inspector of Army hospitals. He was buried in the yard of the Parish Church of Kingston, and is commemorated on a mural tablet erected by the physicians and surgeons of Jamaica, in the cathedral church.

Dr. John Haygarth, F.R.S., noted that Dr. E. N. Bancroft in 1809 made observations on 99 cases of typhus fever and inferred that the latent period of typhus varied from the thirteenth to the sixty-eighth day.

Dr. E. N. Bancroft inherited many of his father's characteristics and interests. He vigorously engaged in controversy, publishing in 1808 "A Letter to the Commissioners of Military Enquiry Containing Animadversions on the Fifth Report" and "A Refutation of various Misrepresentations published by Dr. McGregor and Dr. Jackson in their Letters to the Commissioners of Military Inquiry".

He expanded his Goulstonian Lectures into *An Essay on the Disease Called Yellow Fever, with Observations Concerning Febrile Contagion, Typhus Fever, Dysentery and the Plague*, 8vo, London, 1811. This work, as already mentioned, was edited by his father. He followed this up by *A Sequel to an Essay on the Yellow Fever, Principally Intended to Prove by Incontestable Facts and Important Documents that the Fever called Bulam, or Pestilential, has no Existence as a Distinct or a Contagious Disease*, 8vo, London, 1817.

These books contain many interesting records of disease, but their value is unfortunately destroyed by the author's bias in favour of the theory of non-contagion and by his endorsement of a contemporary belief that yellow fever and malaria were identical.

Like his father, Edward Nathaniel was also a botanist and zoologist. He published papers in the *Zoological Journal*: (1) *On the Fish Known in Jamaica as the Sea-Devil* (1829); (2) *Remarks on Some Animals Sent from Jamaica* (1830); (3) *On Several Fishes of Jamaica* (1831); (4) *Account of Several Fishes and Other Animals of Jamaica* (1832-34) and two botanical papers: (a) *On the Medicinal Plant Called Cuichunchulli, Comparative Botanical Magazine* (1835); (b) *An Account of the Tree Which Produces the Hog-gum of Jamaica, Journal of Botany* (1842).

Samuel, another of Dr. Bancroft, Snr.'s sons, was born in 1775. Like his brother he was educated at Dr. Burney's School. At the age of 17 he matriculated at Trinity College, Cambridge, on May 25, 1792.

In addition to those I have already mentioned in the course of this paper, I should like here to express my thanks to Sir Henry Dale, President of the Royal Society, and Mr. J. D. Griffith Davies, Assistant Secretary, who have helped me with information about Bancroft's Fellowship and communications to the Royal Society. Mr. Johnston Abraham and the Secretary of the Medical Society of London have informed me about Bancroft's membership of the Society.

On Bancroft's work on dyes I have been helped by Mr. C. Bolton and Mr. Lawrence Morris, the Editor of *The Dyer*.

CONCLUSION

The elder Bancroft is one of the most complex personalities in medical history. He was a genius endowed with great natural gifts, and coming as an unknown person to this country early achieved a distinguished position as a scientific physician and chemist. He soon had many influential friends—he had an attractive, hospitable, and kindly disposition—and he made the most of every opportunity that came his way. He was a pioneer in applied chemistry and learned in zoology and botany. In these fields he had an international reputation, and mankind is indebted to him for his work. He had a facile pen and his scientific and political writings are able and informative. He had, indeed, a fatal gift of versatility, which has proved a snare for his posthumous reputation. Some American historians stigmatize him as a scoundrel and a glaring example of perfidy. Dr. Wharton,⁴ contesting George Bancroft's attack on Bancroft before the

Auckland papers were published, said that if Bancroft were really a spy he presents a case of which history affords no parallel. He wrote: "To believe him guilty of such atrocious and yet exquisitely subtle perfidy we must believe that ingenuous, simple-hearted and credulous as he appeared to the general observer . . . he was, nevertheless, a dissembler so artful as to defy the scrutiny of Franklin, with whom he was in constant intercourse, an intriguer so skilful as, without money or power, to deceive Vergennes and the multitudinous police with which Vergennes encircled him; a villain so profoundly wary as to win the confidence of Paul Jones, professedly aiding him in desperate secret raids on the British coast, and yet, by an art almost unfathomable, reserving the disclosure of these secrets to British officials . . . ; a double traitor, whose duplicity was so masterly as to be unsuspected by the British Court, which held him to be a rebel; and by such men as Lafayette, as John Adams, as Jefferson, who regarded him as a true friend'".

Dr. Wharton's defence has proved to be the most scathing description of Edward Bancroft's double-dealing. On this aspect of Bancroft's character, I can only urge that as a spy he took his life in his hands, as he well realized; that he was consistently loyal as a British secret agent; and that he gave full and reliable information and advice to the British Government, advice which if followed might have brought about an honourable and peaceful settlement between Great Britain and America at an early stage of the War of Independence. A man who becomes a spy from patriotic motives without hope or desire of reward may deserve commendation. Bancroft had extravagant tastes and his besetting temptation was money getting. His engaging in shipping of contraband from Britain to America, his holding up of the news of Burgoyne's defeat to make that "killing on the London Stock Exchange", and his acceptance of a salary from both sides can hardly be defended. These sins brought their own punishment, for George III thoroughly distrusted him.

Another defect in his character was that he frequently laboured under a grievance. He was, as Wentworth said, "most difficult to handle".

In the hazardous occupation of a spy he was never found out, and he retained the friendship and even affection of both British and Americans.

He warmed both hands at the fire of life and probably got a good deal of satisfaction out of his adventurous and speculative career. He publicly avowed that "every part of animated nature was created for its own happiness only", and he lived up to that belief.

